Bull 50 Vacuum Manual

SASE Company, Inc.
Phone 800.522.2606 or Fax 877.762.0748
www.SASECompany.com

Corporate Office
26423 79th Ave South
Kent, WA 98032-7321
1.800.522.2606 (P)
1.877.762.0748 (F)
www.SASECompany.com
sales@SASECompany.com

Congratulations on your decision to get the Power of SASE behind you! SASE is committed to excellence, excellence in the quality of products we sell and excellence in service and support after the sale. It is important to us that your business continues to succeed and grow, and we know that the right products, service and support can have a great impact on your bottom line.

SASE has made great strides in the concrete preparation and polishing industry over the years. With a 40,000 square foot distribution and service facility in Seattle, a 22,000 square foot distribution and service facility in Knoxville, and local sales and technical support representatives throughout the United States, SASE is able to provide unsurpassed service and technical support for the contractor.

At SASE we engineer and manufacture our own equipment, which allows us to be in control of the quality of the equipment we sell. SASE offers a complete line of concrete preparation and polishing equipment, our newest introduction being our new line of PDG planetary diamond grinders, which is setting a new standard for the concrete grinding and polishing industry. SASE is also the leader in diamond tooling technology.

We look forward to a long and prosperous partnership with you! Thank you again for choosing SASE. You won't regret having the Power of SASE behind your company!

Sincerely,

SASE Company, Inc.

Jim Weder

President

SASE Company Inc. Equipment Safety Policy Statement

SASE Company, Inc. is adamant that safety is one of the highest priorities for both our employees and customers. When considering set-up and operation of any piece of equipment supplied, manufactured, distributed, rented or serviced by SASE Company, Inc., the safety and protection of people should always be a top priority.

All customers and employees should follow all OSHA and local safety standards, requirements and regulations.

The use of the following safety equipments are both recommended and required when operating any piece of equipment supplied, manufactured, distributed, rented or serviced by SASE Company, Inc.

- OSHA approved/certified eye protection (safety glasses).
- OSHA approved/certified hearing and ear protection.
- OSHA approved/certified foot protection (steel toed boots).
- OSHA approved/certified respirator or breathing device.
- OSHA approved head protection (hard hat).
- Proper protective work gloves.
- Proper protective clothing limiting skin exposure.

(The list is not meant to be all inclusive. Please exercise sound judgments during operation.)

The work area must always have proper ventilation to minimize the health and safety risks of propane and gasoline emissions and airborne dust.

All SASE Company Equipment is engineered, designed and provided with dust control shrouds and vacuum ports. It is strongly recommended that an approved dust containment system be connected to and used in conjunction with all SASE Company equipment during operational use. SASE Company supplies, distributes, rents and services dust control systems with HEPA filtration.

Extreme caution must be exercised at all times when electrical power is considered. All SASE employees are prohibited from working on or hard wiring our equipments to any power source that has not been provided by SASE Company Inc. Any such work must be performed by a certified electrical technician. No SASE employee is permitted or authorized to work on, operate, or connect our equipment or equipment belonging to our customers to an electrical source that does not meet OSHA approved specifications. There are no exceptions to this policy! SASE Company, Inc. also strongly recommends that only certified electricians be permitted to deal with or manipulate electrical power sources within our customers' facilities or on their job-sites.

Finally, we at SASE Company, Inc. cannot stress enough the importance of following general safety practices, the utilization of appropriate safety equipment and the application of common sense when operating equipment supplied, manufactured, distributed, rented or serviced by SASE Company, Inc. both on the job-site and in the field. *(JJL 07/2010)*

Users manual

List of contents

Description of the BULL® 50 2
Technical data 3
Accessories 4
Description of the main parts 5
- Vacuum head with motor and HEPA-filter 5
- Vacuum head with manometer pressure relief valve 5
- Dust container with tube filter 6
- Dust container and filter bag 6

Applications 7
Safety precautions 7
Mode of operation 8
Assembling 9
Collecting dry dust 10
Manometer and filter cleaning during operation 10
Emptying 12
- Re-ordering filter bag etc 13

Cleaning and maintenance 14
- Maintenance of the vacuum head 14

Replacing filters 15
- In general 15
- Control and replacing tube-filter 15
- Replacing HEPA-filter 16
- Disposal of used filters 16

Troubleshooting 17
Service and repair 18

BULL 50

Industrial vacuum cleaner for vacuuming fine dust

Congratulations with your new BULL 50 Industrial vacuum cleaner from SASE Company, Inc.

BULL® 50 is an industrial vacuum cleaner developed to collect very fine dust. BULL® 50 meets the requirements for a handy industrial vacuum cleaner in the building and construction industry. It is ideal to collect fine dust such as cement or dust from grinding machines.

- Self-cleaning Teflon-coated tube-filter
- Filter-cleaning during operation
- Monitoring suction-power during operation
- HEPA-filter
- Average emission during recognized test with quartz-dust 0,06 mg/m^3
- Holds back 99,999% of all particles larger than 0,3 μm (0,0003 mm)
- Dust-collecting in double layer filter bag with patented sealing system for fine dust, in classic P10 filter bag or directly in the dust container

Technical data

BULL® 50 is connected to 120 V power supply.

Make sure that the voltage and fuse from the power supply correspond with the data on the data plate and ind this manual.

The diagram shows the technical data for BULL® 50.

Suction motor by-pass	150	Watt
Suction motor voltage	230	Volt
Suction capacity	2400	mmH_2O
	23,5	kPa
Air flow, max.	60	l/sec
	216	m^3/h
Suction power, max.	353	W
Noise level, 1 m	69	dB(A)
Noise level, 4 m	61	dB(A)
Filter area, tube filter	8000	cm^2
Container capacity	35	l
Height	780	mm
Length	425	mm
Width	425	mm
Weight without accessories	15	kg
Container coupling	Ø40	mm

Accessories

BULL® 50 is delivered with a wide range of accessories including pipes, hose and all the necessary nozzles.

Accessories can be re-ordered using the following part numbers:

1. 40 mm Professionals set 80.33.4017
2. Hose, 4 m 84.54.3809
3. Crevice nozzle 80.34.4000
4. Adaptor for furniture nozzle 80.34.4002
5. Furniture nozzle 80.34.3604
6. Round brush 80.34.4001
7. Floor nuzzle B-370 with brush and wheels 84.38.3620
8. Tubes 80.52.2160

Description of the main parts

BULL® 50 is designed as a handy and compact industrial vacuum cleaner for collecting fine dust and dust hazardous to health. Here follows a description of the main parts and how the work and operate.

Vacuum head with suction motor and HEPA-filter

The Vacuum head is equipped with an integrated handle and switches for the suction motor.

The power full suction motor of the BULL® 50 is placed in the vacuum head.

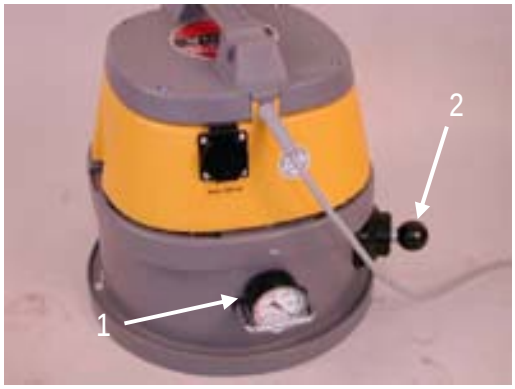
The HEPA-filter is an integrated part of the vacuum head. The HEPA-filter is classified as a Dust-class ”H”-filter.

The filter holds back the finest and smallest dust particles that are not held back by the tube-filter. The HEPA-filter holds back particles of the size of only 0,3 µm (0,0003 mm). The filter surface it self is 1,1 m^2 large and is protected by a metal framework.

Vacuum head with manometer and pressure relief valve

The adaptor ring is an integrated part of the vacuum head. A manometer (1) and a pressure relief valve (2) are mounted on the adaptor ring.

The manometer measures the suction power and has a green and red section. Is the pointer in the red section during operation, it indicates that the filter is being blocked and the air velocity to small. The filter can be cleaned during operation by using the pressure relief valve.

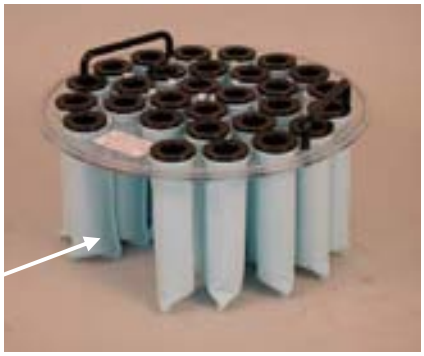


Dust container with tube-filter

The large tube-filter in BULL® 50 is mounted directly in the dust container. The tube-filter is tested with quartz-dust-particles, of which more than half is less than 5 μm. (5 μm is the same as 0,005 mm.) The filter holds back 99,97% of all the particles, which corresponds to an emission of 0,06 mg/m^3 in the cleaned air.

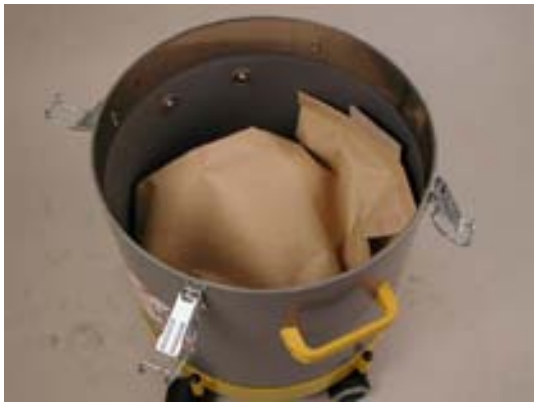
The filter surface is 8000 cm^2 large and covered by a Teflon-coating. The dust particles are held back by the Teflon-coating, which makes it difficult for the particles to block the filter.

The tube filter has a self-cleaning effect during operation.



The filter consists of a number of tubes mounted on springs. During operation the tubes vibrate and part of the dust sucked on to the tube-surface falls down in the dust container.

Dust container and filter bag



The dust container is equipped with five pivotally wheels.

The dust container contains the filter bag and the plastic sack for the collection of dust.

Dust can also be collected directly in the dust container. The classic P10 filter bag can be used if plain dust is being collected.

NOTE: The filter bag cannot be completely filled when collecting very fine dust.

Applications

BULL® 50 is a vacuum cleaner according to DS/EN 60335-2-2 and CEI/IEC 60335-2-69 Annex AA and it may only be used as such.

BULL® 50 may not be used to collect fluids or moist dust.

BULL® 50 is not approved and must not be used for collect flammable, explosive, poisonous or other dust, fluids or gasses hazardous to health.

BULL® 50 may only be used in dry environments and may not be used or stored outdoors under wet conditions.

Safety precautions

- Avoid damaging the supply cord. The supply cord shall be replaced only by the type which is mandatory in this manual.
- The user must ensure that the appliance is adjusted for the task and that statutory requirements are met.
- Connect the appliance to a power supply with reliable connection to earth.
- The plug must be removed from the power supply before repair- and maintenance operations.
- BULL® 50 must be connected to 120 V power supply. Make sure that the voltage and current of the power supply correspond with the data on the data plate and the information given in this manual.

Does the safe use or maintenance of the appliance raise any questions, do not hesitate to contact either your dealer or SASE Company, Inc.

Mode of operation

When the suction motor is turned on, the air is drawn through the appliance collecting dust near the floor nozzle.

Due to the high air velocity the dust particles are transported to the dust container. The large particles are quickly gathered in the bottom of the dust container or in the filter bag.

The air-flow carrying the finer particles continues towards the tube filter. The tube filter separates the majority of the particles.

The tube filter holds back all the particles that are larger than 0,005 mm as well as most of the particles less than 0,005 mm

The finest particles are held back bye the HEPA-filter under the vacuum head. The HEPA-filter holds back 99,999% of all particles larger than 0,0003 mm.

The cleaned air continues through the suction motor and is led through the exhaust filters and the noise reduction foam in the vacuum head.

Finally the air leaves the appliance under the yellow vacuum head.

IMPORTANT! Do not cover the vacuum head during operation. If the air- flow is blocked the vacuum head may be over-heated.

Assembling

- Unpack your BULL® 50 and make sure that everything you ordered is present.
- Assemble the three parts of the pipe and mount an appropriate nozzle.

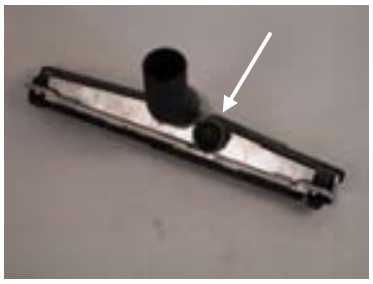
- Fasten the rubber fitting of the hose to the pipe and mount the other end of the hose in the coupling on the dust container on the BULL® 50.
- Make sure that the dust container is empty and that the tube filter is mounted correctly in the dust container. Make sure the filters are not damages. (Also see the chapter “Replacing filters”).
- Use the filter bag with plastic sack if dust hazardous to health is being collected.
- Make sure that the electrical main supply cord and plug are not damaged. Is the cord and/or the plug damaged it must be replaced by an original cord or plug.
- Connect the appliance to 120 V power supply with a reliable connection to earth. Make sure that the power supply corresponds with the data on the data plate.
- BULL® 50 is now ready to collect dust. The suction and collecting process is described in details in the following chapter.

Collecting dry dust

When the appliance is correctly assembled it can be started on the red switch on the vacuum head.

During operation BULL® 50 can be driven around on the five pivotally wheels.

The floor nozzle is suitable for collecting dust from larger horizontal areas. The nozzle is equipped with adjustable wheels securing an optimal positioning of the nozzle on the floor.



Eventually the brushes will be torn, reducing the efficiency of the nozzle. Adjust the wheel-height using the knob to secure, that the brushes only just touches the floor.

Manometer and filter cleaning during operation

The manometer placed on the adaptor ring measures the air pressure inside the appliance during operation.

If the tube filter is blocked by fine particles, the air pressure inside the appliance will drop.

The manometer will indicate the drop in air pressure. By reaching the red section the pointer indicates that the air velocity in the hose is to low and that the tube filter needs to be cleaned.

The tube filter is cleaned during operation:

- Release the hose from the pipe
- Press the hose against the pressure relief valve.

Vacuum is now being build up inside the machine and in the hose. At the same time the springs in the filter tubes will be pressed together.

- Let the hose remain on the pressure relief valve
- Pull out the pressure relief valve.

The springs in the filter tubes will now expand and release the blocking dust particles.

At the same time fresh air floats the opposite way through the tube filter in order to equalize the pressure in the dust container and in the hose.

In this way the tube filter is cleaned in an effective way. The effect of the cleaning process can be seen on the manometer.

If necessary repeat the filter cleaning process until the pointer of the manometer re-enters the green section.

It is advisable to leave the appliance for a few minutes before emptying it – especially if the appliance is used without filter bag. This allows the dust to settle and the risk of polluting the environment during the emptying process is reduced.

NOTICE:
The manometer on the BULL® 50 is calibrated for correct indication, when the appliance is used with its standard accessories (40 mm). Using hoses or pipes of a smaller dimension the manometer will indicate too high a value. To be safe having the sufficient air velocity in pipe and hose, it is recommended to clean the filter and if necessary to empty the appliance, if the pointer of the manometer enters the red section.

Emptying

BULL® 50 can collect dust directly in the dust container, in the classic P10 filter bag or in filter bag with protective plastic sack (Used when collecting dust hazardous to health) It is advisable to leave the appliance for a few minutes before emptying it – especially if the appliance is used without filter bag. This allows the dust to settle and the risk of polluting the environment during the emptying process is reduced.

- Release the vacuum head by releasing the four clips securing the vacuum head p on the dust container.
- Place the vacuum head on a dry and clean surface.
- Pull out the tube filter using the two handles.
- Gently place the tube filter on a dry, clean and horizontal surface.

Have no filter bag been used, the dust container can now be emptied.

If filter bag have been used:

- Release the filter bag from the container coupling
- Close the filter bag with the patented bag closing system.
- The filter bag can now be disposed.

If the filter bag with plastic sack is used – release the plastic sack and wrap it around the filter bag.

- Closed the sack with the plastic strip
- Remove the sack from the dust container
- Dispose the sack

In this way dust-free emptying is obtained.

The plastic sack is also marked with step-by-stop emptying instructions.

- Place a new filter bag (P10) in the dust container.
- Wrap the collar of the filter bag around the coupling in the dust container
- Remount the tube filter and the vacuum head.

Collecting dust the filter bag with plastic sack can be used to secure dust-free emptying:

- Wrap the collar of the filter bag around the coupling in the dust container
- Pull the plastic sack aside so it does not cover the filter bag.
- Remount the tube filter and the vacuum head.

Re-ordering filter bag with plastic sack and filter bag P10

Filter bag with plastic sack 84.64.0015
Filter bag P10.....84.64.0010

Cleaning and maintenance

IMPORTANT!
The appliance must not be connected to the poser supply during cleaning or maintenance.

Empty the appliance after each use to avoid the risk for spontaneous ignition.

Clean the appliance the following way:

- Clean the tube filter depending upon the need. Follow the instruction in the section: “Manometer and filter-cleaning during operation”.
- Wipe the outer surface of the appliance with a wet og dry cloth.

Maintenance of the vacuum head

The vacuum head is manufactured from maintenance-free parts and needs no daily maintenance apart from external cleaning as described above.

- A daily inspection of the electrical cord and plug is advisable to avoid electrical hazards and accidents.
- Wipe the outer surface of the vacuum head with a wet or dry cloth.

To secure the reliability of the appliance an annual inspection at an authorised service centre is recommended.

It is recommended to let an authorised service centre inspect the suction motors after approximately 800 working hours.

Replacing filters

In general

When replacing the filters, the necessary precautions to protect the environment and the respiratory passages of the operator must be taken. The nature and scope of these precautions must be based upon the type of dust sitting on the surfaces of the tilters. Before checking or replacing the filters, clean the tube filter and empty the appliance as described earlier.

Control and replacing the tube filter (Item number. 84.67.1111)

The tube filter is manufactured from very robust filter material and has a very long life span. Inevitable the surface of the filter will be mechanically worn by all the small particles. Consequently the filter must be checked for holes and fissures on a regular basis. Even small holes in the tube filter will allow particles to penetrate the filter and then be held back in the HEPA-filter. The HEPA-filter is designed for very small particles and will rapidly be blocked if the tube filter is damaged.

- Release the vacuum head by releasing the four clips securing the vacuum head to the dust container.
- Place the vacuum head on a dry and clean surface.
- Inspect the upper surface of the tube filter. Can dust particles be visually identified on the top surface; this indicates that the tube filter is damaged or worn.

A damaged or worn tube filter must be replaced.

A replacement of the tube filter should include a replacement of the HEPA-filter as well. Please see the next section.

Replacing the HEPA-filter (Item number 84.67.5006)

- Dismount the vacuum head by releasing the four container clips.
- Place the vacuum head on a horizontal, dry and clean surface and upside down.
- Loosen the screw holding the HEPA-filter.
- Remove the HEPA-filter.
- When mounting a new HEPA-filter make sure, that the surface of contact between the HEPA-filter and the vacuum head is clean.
- Tighten the screw so the HEPA-filter is secured under the vacuum head.

The bottom of the HEPA-filter is made of a thin metal material, so be sure not to tighten the screw too much.

Disposal of used filters

When disposing used filters make sure that they are disposed according to the guidelines given by local and national environmental authorities.

Trouble shooting

If the appliance does not collect material in a satisfactory way:

- The suction hose, tube or nozzle may be blocked.
  Stop the appliance and remove the blocking.

- The dust container or the filter bag may be full.
  Stop the appliance and empty the dust container and filter bag (Refer to the section: "Emptying").

- There may be a leak between the vacuum head and the dust container.
  Start the appliance and block the suction hose. Normally a leak can be located by its characteristic sound. Dismount the vacuum head *and inspect the area where the leak was located. Make sure that the surfaces of contact are clean and remount the* vacuum head*. Repeat the operation if necessary.*

- The filter bag may be blocked.
  The filter bag cannot be completely filled if very fine dust is collected.
  Replace the filter bag.

- The tube filter may be blocked.
  Clean the tube filter (Refer to the section "Manometer and filter cleaning during operation").

- The HEPA-filter may be blocked.
  Replace the HEPA-filter. (Refer to the section "Replacing HEPA-filter").

Service and repair

Service and repair are free of charge within the warranty period (invoice must be presented) under the following conditions:

- The defect is caused due to defects in materials or defective design. (Defects due to normal wear, misuse or insufficient maintenance are not covered by the warranty.)

- No repair attempts have been made by parties other than SASE Company, Inc. or authorised service centres approved by SASE Company, Inc.

Service and repair free of charge includes spare parts and the cost for related working hours.

The appliance shall be delivered to the factory or send postage paid to:

SASE Company, Inc.
26423 79th Ave South
Kent, WA 98032

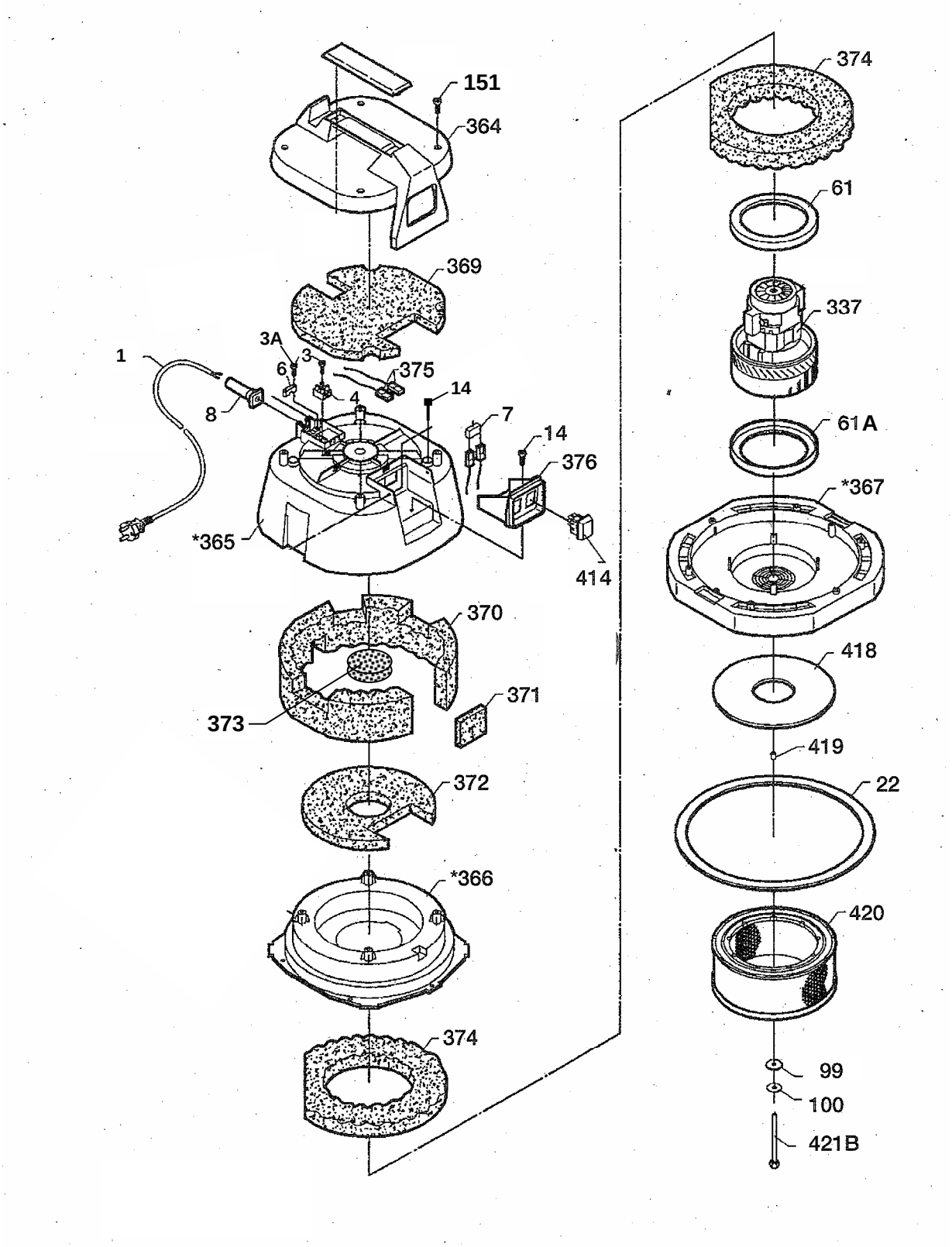
Phone: 800.522.2606
Fax: 877.762.0748
www.SASECompany.com

SASE Company, Inc. reserves the right to introduce changes without further notice.

SASE Company, Inc.	Spare parts list	BULL 50

Pos.	Description	Itemnr.	Pos.	Description	Itemnr.
3	Screw	81970030	382	Wheel	81873821
3A	Screw	83970023	414	Switch	81754560
4	Supply terminal	81750040	418	Self-adhesive contact plate	83894180
6	Relief bracket	81750060	419	Thread inset	83974190
7	Muffling condenser	81750070	420	HEPA-filter	84675006
8	Line entrance	81750080	421B	Bolt	8397421B
12	Cable	81750052	422	Pressure differential gauge	80310069
14	Screw	81970140	424	Adaptorring	8389424B
22	Container seal	81950220	493	Pressure compensation valve	8389492A
29A	Nut	83975178	492	Female cone	81814930
43	Rivet	81970430	494	Washer for conic neck	81954940
61	Upper motor washer	81950610	510	O-ring	83955100
61A	Lower motor washer	81950611	511	Rubber packing	83955110
77	Washer	81970771	512	Tube filter	84671111
98A	Yellow handle	8191098A	513	Dust container	83775131
99	Rubber washer	8197099A	514	Wheel ring	83855140
100	Washer	81971000	516	Protective ring	83975160
151	Screw	81971510	521	Bolt	81970045
271	Rubber washer	81952710	529	Screw	83975290
317	Counter nut	83973170	530	Washer	83975300
318	Disc	85973180			
337	Motor	84720120			
339	Container seal	81953390			
342	Container clips	8191342A			
364	Grey cap	81893640			
365	Yellow motortop	81893650			
366	Air duct plate	81893660			
367	Grey motorbottom	8189367D			
369	Muffling foam	81933690			
370	Muffling foam	81933700			
371	Muffling foam	81933710			
372	Muffling foam	81933720			
373	Muffling foam	81933730			
374	Muffling foam	81933740			
375	Lead with flat plug	81753750			
376	Switch housing	8189376A			
380	Container adjutage	81813800			

SASE Company, Inc.	Spare parts list	BULL 50



SASE Company, Inc.	Spare parts list	BULL 50